

Title (en)
Switching power source

Title (de)
Schaltnetzteil

Title (fr)
Source de puissance à découpage

Publication
EP 0938184 A2 19990825 (EN)

Application
EP 99301339 A 19990224

Priority

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- JP 35354798 A 19981211
- JP 35354998 A 19981211
- JP 2073999 A 19990128

Abstract (en)
In a switching power source of the RCC system in which excited energy, accumulated in a transformer during an on-period of a main switching element, is outputted to the secondary side during an off-period, and a ringing pulse, which appears in a control coil of the transformer upon completion of the output, is fed back to the gate of the main switching element through a capacitor used for cutting a dc so that the main switching element is on-driven, a bias resistor is interpolated between the capacitor and the gate, and during the stand-by state, a control transistor is turned on, with the connecting point between them being connected to a main power-source line in a low level through a series circuit consisting of a diode, Zener diode and a resistor. Thus, a higher charge is allowed to accumulate in the capacitor, and the ringing pulse is reversely biased by the charge so as not to cause the re-starting. It becomes possible to reduce the switching frequency during the stand-by state in light load, and consequently to improve the power-conversion efficiency by using a simple construction. <IMAGE>

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H02M 3/338

IPC 8 full level
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CPC (source: EP US)
H02M 3/3385 (2013.01 - EP US); **H02M 1/0032** (2021.05 - EP US); **Y02B 70/10** (2013.01 - EP US)

Cited by
DE10143692B4; EP1150417A1; GB2393801A; GB2393801B; EP1120893A3; EP1130753A3; US6898090B2; US6532159B2

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